

JAN 30 2007

Atty. Dkt. No. 027209-0901

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In the specification, paragraphs have been added on pages 1 and 6.

Claims 24-30 are requested to be cancelled without prejudice or disclaimer.

Claim 1 is currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-23 are now pending in this application.

Objections to the Specification

The Office Action objected to the Abstract of the disclosure for including legal phraseology. Applicant has submitted herewith a new abstract. The objection to the abstract should now be withdrawn.

The Office Action objected to the disclosure for certain informalities. By way of the present amendment, Applicant has amended the specification to correct the informalities. No new matter has been added. Accordingly, the objections to the disclosure should now be withdrawn.

Further, as suggested by the Examiner, Applicant has amended the title of the invention to be more clearly indicative of the invention.

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Claim Rejections under 35 U.S.C. § 112

Claim 14 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for including the term “vicinity”. Applicant respectfully traverses the rejection of claim 14.

Claim 14 recites that the “first end of the gas line opens into an area in the vicinity of a sealing gap...” The Office Action argues that “the specification does not provide a standard for ascertaining the requisite degree...” Applicant respectfully disagrees. The specification (e.g., page 10, fourth paragraph) and the figures (e.g., Figure 2) clearly illustrate an area in the vicinity of (or proximate to) the sealing gap into which the gas line opens. One of skill in the art would be able to clearly ascertain the scope of the claim based on the disclosure. Accordingly, the rejection of claim 14 under 35 U.S.C. § 112 should be withdrawn.

Claim 29 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for reciting “the internal region”. Applicant has canceled claim 29 without prejudice or disclaimer. The rejection of claim 29, therefore, is moot.

Claim Rejections under 35 U.S.C. § 102

Claims 1-5, 15-19, 21 and 23-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,368,530 to Edwards (hereinafter “Edwards”). As to canceled claims 24-27, the rejection is moot. As to claims 1-5, 15-19, 21 and 23, Applicant respectfully traverses this rejection for at least the following reasons.

Embodiments of the present invention relate to degassing devices for circulation pumps for fluids. As described in the specification, strong fluid eddies can form at the impeller or around the impeller. In one embodiment, eddies form in an interior cavity of the impeller. In the case of gas dissolved in the fluid, a cushion of gas can accumulate, thereby disrupting the flow of the fluid through the pump. In accordance with embodiments of the present invention, a gas line opens into an area of the impeller, and the gas can be coupled out of the area of the impeller based on a difference in pressure. In one embodiment, the lubrication of the bearings of the impeller is brought about by the fluid. Thus, the coupling of the gas out of the area can avoid the

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ganger of dry bearings, which can cause permanent damage. Applicant has amended claim 1 to recite that the impeller has "bearings adapted to be lubricated by the fluid." Support for this feature can be found in the specification at page 16, lines 1-2, for example.

In sharp contrast, Edwards fails to teach or suggest at least this feature of the pending claims. Edwards relates to a device for pumping liquid material. The pump disclosed in Edwards does not have a rotatable impeller with bearings that are lubricated by the fluid transported by the pump. As clearly illustrated in Figures 1 and 5 of Edwards, the bearings for the shafts 32 and 68 are in a motor housing 22 or motor housing 52. In this configuration, the bearings cannot contact the fluid to be transported and, therefore, cannot be lubricated by the fluid.

Further, the Office Action cites the pipe 79 of Edwards as constituting a gas line, as recited in independent claim 1. Applicant respectfully disagrees with this interpretation of the disclosure of Edwards. The pipe 79 of Edward is provided for conducting excess liquid upwardly to a point adjacent to the upper end of the housing. Therefore, the pipe 79 of Edwards is not a gas line.

Since Edwards fails to teach or suggest at least these features, claim 1 is not anticipated by Edwards. Therefore, claim 1 is patentable. Claims 1-5, 15-19, 21 and 23 depend, either directly or indirectly, from allowable claim 1 and are, therefore, patentable for at least that reason, as well as for additional patentable features when those claims are considered as a whole.

For example, claim 21 recites that "the first end of the gas line faces a central area of the impeller." Edwards clearly fails to teach or suggest this feature. Figure 5 of Edwards shows that the pipe 79 does not face a central area of the impeller.

Claim Rejections under 35 U.S.C. § 103

Claims 6, 7, 8, 10 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of U.S. Patent No. 3,970,555 to Savage. Claims 11 and 12 were rejected

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under 35 U.S.C. § 103(a) as being unpatentable over Edwards and Savage in view of U.S. Patent No. 4,163,456 to Herron. Claims 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of Savage and Herron. Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards and Savage in view of U.S. Patent No. 4,905,863 to Blomquist. Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of U.S. Patent No. 2,422,956 to Edwards. Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of U.S. Patent No. 4,834,628 to Laing. Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of U.S. Patent No. 5,449,454 to Hickok. Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Edwards in view of U.S. Patent No. 4,205,947 to Ruhl. As to canceled claims 28-30, the rejection is moot. As to claims 6-14, 20 and 22, Applicant respectfully traverses this rejection for at least the following reasons.

Claims 6-14, 20 and 22 depend, either directly or indirectly, from allowable claim 1 and are, therefore, patentable for at least that reason, as well as for additional patentable features when those claims are considered as a whole.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37

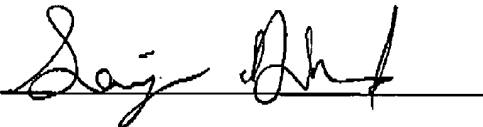
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C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

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